Castlemaine Naturalist

June 2013

Vol. 38.5 #410

Monthly newsletter of the Castlemaine Field Naturalists Club Inc.

Pink-eared Duck Photo – Debbie Worland

Matt Sheehan at the May meeting

Matt had an early interest in plants, influenced first by his father's excursions in the bush, then by his primary teacher Ian O'Halloran, followed at Tech school level by excursions with Ern Perkins. At Latrobe Uni Bendigo, he took on coastal geomorphology, which is exemplified by rapid change. A coastal zone changes in a matter of years rather than thousands of years, so it presents an immediate and on-going problem. With this topic becoming a passion, Mat went on to major in his other main interest, botany, leading to his special interest in the relationships between the plant world and the physical world, especially in coastal settings.

This became the background to his Ph.D., and inevitably led to the study of invasive weeds which impact negatively on such environments. Marram grass *Ammophila arenaria* was a prominent part of his Honours project on its influence on the wild and beautiful Croajingalong coastline in east Gippsland. This grass has been extensively planted to stabilise dune sand in Victoria.

Matt showed us photos of the dune structures which result from the accretion of aeolian (wind blown) sand by Marram grass compared with the more open effect of native spinifex which produces a terraced landform. The former results in high and hummocky dunes.

Cuspate headlands of sand along the coast are re-distributed by the prevailing SW winds to produce elongated dunes 30 to 40 metres high, moving NE. Vegetation is sparse here, and the dunes travel across Cape Howe and deposit sand into the sea, supplying the beaches of the southern coast of NSW. The introduction of Marram grass in the seventies

has resulted in the formation of high dunes, and considerable change to the structure and vegetation of the coastline.

Matt's Ph.D. was part of a government investigation into the consequences of removing the heavy infestation of the weed *Spartina anglica* from the Tamar estuary. Complex risks included the possible release of contaminated sediment accumulated from industry and shipping. The Tamar estuary north of Launceston is a drowned river valley some 70 km long, and is tidal over this length. *Spartina anglica* is thought to have hybridised from two species out of England and America to produce a plant much more vigorous than its parents. Known as a stabiliser, it was deliberately introduced by the Dept. of Ag. In 1947 to stabilise the banks of this major shipping channel. It now seems impossible to eradicate, even if this could be done without detrimental effects. This dense, tough plant builds up terraced mud-flats by trapping silt and mud during tidal interludes. It is called an 'ecosystem engineer' because it changes the environment to suit itself.

The work by Matt on these research projects led to his involvement in government policy initiatives. An invasive weeds program had been initiated in the 1990's. Over all States and territories, 32 plants of National significance were identified and a best practice manual produced for each weed. Matt's recent work is involved with the section of Policy which is perhaps the hardest to solve – new and introduced weed occurrences and how to deal with them. For the past two years he has been writing policy as the National Weed Spread Co-ordinator.

The Intergovernmental Agreement on Bio-security led to increased activity toward prevention of foreign weed invasion. To this end Matt is now working on the 'National weed spread prevention initiative'. Negotiating the co-ordination of the different States is perhaps the most difficult part of the task. Industry is a big player in the spread of weeds, and the task also involves educating them on preventative measures, e.g., the mining industry opening up the Pilbara on a large scale is very likely to result in the invasion of weeds.

Matt outlined the steps around surveillance (searching for new weeds) and then management response; eradication or containment, or if the problem is beyond control (e.g., gorse or blackberry) it gets down to asset protection, such as preventing spread into riparian zones. Finally he noted the formation of the ISPEI (invasive sp prevention and early intervention) bulletin which is being set up as a network of interest groups involved in new and emerging weeds and the protection of native ecologies.

- Noel.Young.

Chinaman's Creek and Golden Point Reservoir 11.5.13

Geraldine Harris

Our May excursion was a very pleasant wander along Chinaman's Creek in ideal autumn weather. Apart from a large group of scouts and guides from Caroline Springs, that were just finishing their bushwalk, there did not seem to be much about at first and everything seemed very dry.

We noted a lot of mistletoe on some large eucalypts surrounding a clearing. Mistletoes are semi-parasitic flowering plants that source water and minerals from their host but produce their own energy through photosynthesis. They are an important food source for birds and insects with many species dependant on them for survival. In southern Australia alone, 41 species of birds, mainly honeyeaters, feed on mistletoe for some part of the year and bird abundance is positively correlated with the occurrence of mistletoe. Mistletoe birds, with their unique sideways seed deposit method, are the main dispersers of mistletoe. Severe mistletoe infestations are a symptom of a stressed ecosystem and removal will not necessarily bring trees back to health.

There was a very large Yellow Box tree with new bright green leaves growing along the length of many of its branches much like the regrowth that occurs after fires. Like many trees in the district, this tree appeared to have been so stressed by the dry conditions that it was making a desperate attempt to repair itself. Perhaps the wispy "mare's tails" cloud formations overhead that are believed to indicate the onset of rain in 10-30 hours would soon provide some respite for this thirsty giant.

Among the Tall Sedge (*Carex appressa*) and Cumbungi (*Typha* sp), where there was a small amount of water flowing along the creek, we heard several different frogs and photographed one small flowering head of Floating Pond-weed (*Potamogeton tricarinatus* s.l.).

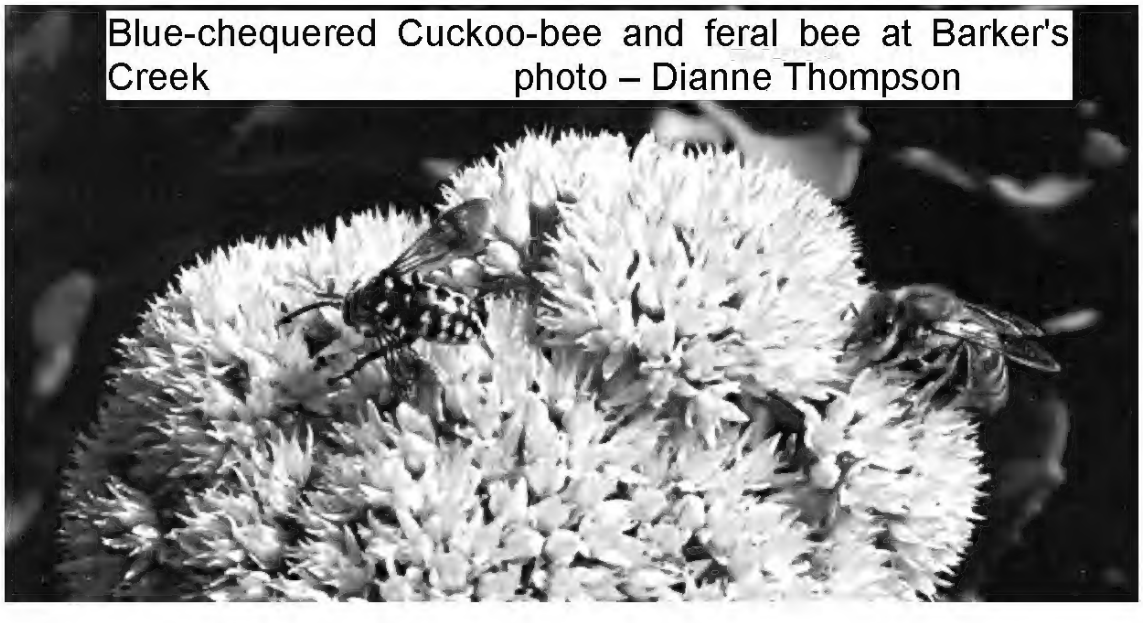
Our bird list for the day included Superb Fairy-wrens, Eastern Rosellas, a Red-browed Finch, Yellow-tufted, Brown-headed and White-naped Honeyeaters, Spotted Pardalotes, a Magpie, a Blackbird and a Yellow Robin. At Golden Point Reservoir we added a Dusky Moorhen and a Darter that sat drying his wings in the sun.

Reference:
McIntyre, McIvor & Heard, (ed.) 2002, *Managing and Conserving Grassy Woodlands*, CSIRO Publishing, Collingwood, Vic.
Cunningham, Mulham, Milthorpe & Leigh, 1992, *Plants of Western New South Wales, Incata Press,* Melbourne.
Castlemaine Plant List, Ed 11.45, Castlemaine Field Naturalists Club Inc.

Afternoon tea at Expedition Pass

photos – Geraldine Harris

~~~~~~



Blue-chequered Cuckoo-bee and feral bee at Barker's Creek photo – Dianne Thompson
~~~~~~

Little Friar-bird

photo by Debbie Worland

May Roadside Clean-up

The Castlemaine Field Naturalists Club is responsible for keeping a stretch of the Pyrenees Highway from the top of McKenzies Hill to past the Castlemaine Golf Course cleared of rubbish. It is a particularly diverse area of native vegetation and was chosen by the club for this reason. Three of four times a year we arrange a roadside cleanup where we don our bright jackets and working in pairs we clean up all the rubbish accumulated in the area.

Last month ten members did an excellent job and we ended up with a full ute load of rubbish that included 33 large bags of roadside rubbish plus a number of tyres and a metal door.

Well done Sue, Kit, Helen, Eileen, Jan, Max, Chris, Lisa, Geoff and Geraldine.

Introducing Lynne Kelly – this month's speaker

"Love Thy Spider"

We all live up close to lots of neighbouring spiders. They live amazingly interesting, often traumatic, lives, all played out on multiple stages around your house. Spiders are the only animal you can get to know as individuals and watch over the long term in their natural habitat of web or burrow. This talk will include sequences of photos of individuals in a Castlemaine backyard and house. It will really suit kids, too, as observing spiders is easy to do, safe and genuinely adds to our scientific knowledge. Long term behavioural studies of our spiders in their natural habitats have not been done - not even black house spiders! But - be warned - there will be some very revealing sex photos of a pair of huntsmen. We'll then talk about "The Spiderblogger" and the way we can share Castlemaine spider notes.

Lynne Kelly is the author of 14 books, her most recent being "Spiders: learning to love them". When her arachnophobia was getting out of control, she decided to cure the irrational fear by learning about the horrible hairy beasts. She overdid the cure and is now obsessed by the gorgeous little critters. Lynne is an Honorary Visiting Research Fellow at LaTrobe University, working on the way indigenous peoples memorise masses of information about animals, plants and other natural sciences. She then applies this research to the archaeological record.

Moss group progress

Noel Young

Members may recall that last spring, Cassia Read spoke to the club on bryophytes and led an excursion the next day to Clinkers Hill where we found a number of the mosses she talked about. We learned also that a group had formed to study and photograph the local mosses, with a view to eventually producing a field guide.

With the onset of some wet weather I recently joined Cassia and friends for another preliminary look at the same area. I also had a sneak preview of some draft pages of the field guide, which contains some impressive photos taken by Bernard Slattery and other members of the group. This will be a unique addition to our local guides, and Bernard expects it will be finished later this year. It is obvious however, that to properly identify many of the species, a strong magnifier is needed to see the diagnostic features. A 10x lens is a minimum, and some of the identifiers run into the microscopic range.

Observations – Denis Hurley

April 10 – Crimson Rosella enjoying mature/dry Basil seeds from pot close to back door.

April 13 – 7pm Perrons Tree Frogs (5 mid-size) *Litoria peronii*, on frame of water tank beside house

April: Bronze-wing Pigeon, *Phaps chalcoptera* nesting in very old Yellow Box at front gate. [At 10th May had not raised young – sad]

April 15 – 9.30am Grey Kangaroo looking down paddock ~ 150m away a fox was stalking (probably) a rabbit.

April 16 – Possible Bougainville's Skink (80-90mm) on back porch!

April 26 – Yellow tufted Honeyeaters at bird bath – have not seen them here for many years.

April 30 – Southern Yellow Robin on back porch

May 1 – Golden Whistler, three at bird bath

It may be the shortage of clean water or useful dam water that is bringing in more than the usual crowd close to the house these last weeks

Observations

- Reports at the May meeting -
- Recent Orchid sightings on plant survey outings with Ern and Lesley in the Smiths Reef area of the Maldon Historical Reserve: two different Midge Orchids, Autumn Greenhood, Red-tip Greenhood, Parson's Bands – Richard Piesse
- Swift Parrots at the golf course near the clubhouse - Lorraine Le Plastrier
- Flame Robins at Guildford – Geoff Harris
- Geraldine Harris described how she and companions stopped the traffic for an Echidna crossing the road into the Botanical gardens in the middle of the day
- Max reported seeing a Thick-tailed or Barking Gecko in the bush on McKenzies Hill
- Other discussions covered the abundance of moths, frogs and mixed flocks of birds, a Bittern (sp?) seen on the river near Guildford, and Rainbow Lorikeets reported in Gainsborough st.
- May 14; Little Friarbird, Blue-faced Honeyeaters, Pink-eared Duck and a few Swift Parrots still around – Debbie Worland

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

Castlemaine Field Naturalists Programme
June 2013

Fri June 14 meeting: speaker LYNNE KELLY on spiders

Sat June 15 field trip: Bushland at the Back Ck Siphon

Fri July 12 meeting: speaker JULIAN HOLLIS – local geology

VISITORS ARE WELCOME AT CLUB ACTIVITIES

General meetings - (second Friday of each month, except January) are held in the Uniting Church (UCA) Hall (enter from Lyttleton St.) at 7.30 pm.
Field Trips - (Saturday following the general meeting) leave from the car park opposite Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise. BYO morning and/or afternoon tea. Outdoor excursions are likely to be cancelled in extreme weather conditions. There are NO excursions on total fire ban days.
Business meetings - fourth Thursday of each month, except December, at George Broadways; 24a Greenhill Ave., at 7.30 pm. Members are invited to attend.

Subscriptions for 2013
Ordinary membership: Single $30, Family $40
Pensioner or student: Single $25, Family $30
Subscription includes postage of the monthly newsletter, Castlemaine Naturalist

2013 Committee

Rita Mills (President)			5472 4553
George Broadway (Secretary)	georgebroadway@bigpond.com		5472 2513
Nigel Harland (Treasurer)	5474 8246	Barbara Guerin	5472 1994
Chris Morris	0418 996 289	Richard Piesse	0448 572 867
Chris Timewell	5472 1553	Noel Young (Editor)	5472 1345

[email newsletter material to: **noel.young@optusnet.com.au**]

Castlemaine Field Naturalists Club Inc. PO Box 324, Castlemaine, 3450.
Inc #A0003010B